WHAT IS CLAIMED IS:

1.   A method for creating a data structure in a data storage medium for describing different data contents stored therein, the method comprising the steps of:

5   creating at least one content object in the medium, the object containing data contents;

creating an object definition file associated with the object in the medium, the object definition file describing the object; and

creating an index file in the medium, the index file including a table of
10   contents having a reference to the object.

2.   The method of claim 1, further comprising:

creating a plurality of content objects in the medium; and

creating a presentation file in the medium, the presentation file including presentation definitions of content objects to be played.

15   3.   The method of claim 2, further comprising a step of creating a file system in the medium.

4.   The method of claim 2, wherein the presentation file is written in a meta language.

5.   The method of claim 4, wherein the meta language includes
20   one of the following: Extensible Markup Language (XML), Synchronized

Multimedia Integrated Language (SMIL), and a custom-defined meta language.

6.   The method of claim 1, wherein the object definition file is written in a meta language.

5   7.   The method of claim 6, wherein the meta language includes one of the following: Extensible Markup Language (XML), Synchronized Multimedia Integrated Language (SMIL), and a custom-defined meta language.

8.   The method of claim 1, wherein the index file is written in a meta

10   language.

9.   The method of claim 8, wherein the meta language includes one of the following: Extensible Markup Language (XML), Synchronized Multimedia Integrated Language (SMIL), and a custom-defined meta language.

15   10.   The method of claim 1, wherein the data storage medium is an optical storage medium.

11.   A method for creating a logical format in an optical storage medium for describing multimedia data stored therein, the method comprising the steps of:

20   creating at least one content object on the disc, the object containing data contents;

creating an object definition file associated with the object in the medium, the object definition file being written in a meta language and describing the object; and

creating an index file in the medium, the index file being written in a
5   meta language and including a table of contents having a reference to the object.

12.   The method of claim 11, wherein the meta language includes one of the following: Extensible Markup Language (XML), Synchronized Multimedia Integrated Language (SMIL), and a custom-defined meta
10   language.

13.   The method of claim 11, further comprising:

creating a plurality of content objects in the medium; and

creating a presentation file in the medium, the presentation file including presentation definitions of content objects to be played.

15   14.   The method of claim 13, further comprising a step of creating a file system in the medium.

15.   The method of claim 14, wherein the playlist definition file is written in a meta language.

16.   A data storage medium for storing data for access by a data
20   processing system, comprising:

a data structure stored in the medium for describing different data contents stored therein, the data structure including:

at least one content object containing data contents,

an object definition file associated with the object, the object

5   definition file describing the object, and

an index file including a table of contents having a reference to the object.

17.   The medium of claim 16, wherein the data structure further comprises a plurality of content objects and a presentation file, the

10   presentation file including presentation definitions of content objects to be played.

18.   The medium of claim 17, wherein the data structure further comprises a file system.

19.   The medium of claim 18, wherein the playlist definition file is

15   written in a meta language.

20.   The medium of claim 19, wherein the meta language includes one of the following: Extensible Markup Language (XML), Synchronized Multimedia Integrated Language (SMIL), and a custom-defined meta language.

20   21.   The medium of claim 16, wherein the object definition file is written in a meta language.

22.   The medium of claim 21, wherein the meta language includes one of the following: Extensible Markup Language (XML), Synchronized Multimedia Integrated Language (SMIL), and a custom-defined meta language.

5   23.   The medium of claim 16, wherein the index file is written in a meta language.

24.   The medium of claim 23, wherein the meta language includes one of the following: Extensible Markup Language (XML), Synchronized Multimedia Integrated Language (SMIL), and a custom-defined meta 10   language.

25.   The medium of claim 16, wherein the data storage medium is an optical storage medium.

26.   An optical storage medium for storing data for access by a data processing system, comprising:

15   a data structure that implements a logical format of the medium for describing multimedia data stored therein, the data structure including:

at least one content object containing data contents;

an object definition file associated with the object, the object definition file being written in a meta language and describing the object; 20   and

an index file being written in a meta language and including a table of contents having a reference to the object.

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27. The medium of claim 26, wherein the meta language includes one of the following: Extensible Markup Language (XML), Synchronized Multimedia Integrated Language (SMIL), and a custom-defined meta language.

5   28. The medium of claim 26, wherein the data structure further comprises a plurality of content objects and a presentation file, the presentation file including presentation definitions of content objects to be played.

29. The medium of claim 28, wherein the data structure further
10   comprises a file system.

30. The medium of claim 29, wherein the playlist definition file is written in a meta language.

31. A disc player for playing back a disc having a logic format that includes at least a content object containing data contents, an object
15   definition file associated with the object for describing the object, and an index file including a table of contents having a reference to the object, the player comprising:

means for parsing the index file to obtain the table of contents;

means for prompting a user to select the object;

20   means for parsing the object definition file to determine whether the object selected is playable; and

means for playing back the object.

32. The player of claim 31, further comprising means for including the object in a new table of contents if the object is playable.

33. The player of claim 32, further comprising means for presenting the new table of contents to the user.

5   34. The player of claim 31, wherein the parsing means includes means for obtaining a parser from the disc for parsing the index file if the parser is not available in the player.

35. The player of claim 34, wherein the obtaining means obtains the parser from the Internet if the parser is neither in the player nor on the disc.

10   36. A method for playing back a disc having a logic format that includes at least one content object containing data contents, an object definition file associated with the object for describing the object, and an index file including a table of contents having a reference to the object, the method comprising the steps of:

15   parsing the index file to obtain the table of contents;

prompting a user to select the object;

parsing the object definition file to determine whether the object selected is playable; and

playing back the object.

20   37. The method of claim 36, further comprising a step of including the object in a new table of contents if the object is playable.

38.   The method of claim 37, further comprising a step of presenting the new table of contents to the user.

39.   The method of claim 36, wherein the parsing step includes a step of obtaining a parser from the disc for parsing the index file.

5   40.   The method of claim 39, wherein the obtaining step includes a step of obtaining the parser from the Internet if the parser is not on the disc.